

## DOMAIN EPITAXY FOR THIN FILM GROWTH

## ABSTRACT OF THE DISCLOSURE

A method of forming an epitaxial film on a substrate includes growing  
5 an initial layer of a film on a substrate at a temperature  $T_{growth}$ , said initial layer  
having a thickness  $h$  and annealing the initial layer of the film at a temperature  
 $T_{anneal}$ , thereby relaxing the initial layer, wherein said thickness  $h$  of the initial  
layer of the film is greater than a critical thickness  $h_c$ . The method further  
includes growing additional layers of the epitaxial film on the initial layer  
10 subsequent to annealing. In some embodiments, the method further includes  
growing a layer of the film that includes at least one amorphous island.